

Security Class

Holder Account Number

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Form of Proxy - Annual Meeting to be held on May 5, 2017

Notes to proxy

1. Throughout this document *TransCanada* means TransCanada Corporation and *you* and *your* mean the holder of common shares of TransCanada Corporation.
2. **You have the right to appoint anyone to attend and act on your behalf at the meeting (proxyholder) – the person does not need to be a TransCanada shareholder. If you wish to appoint a person other than the management nominees listed in this form of proxy, please insert the name of your chosen proxyholder in the space provided (see reverse).**
3. If the shares are registered in the name of more than one owner (for example joint ownership, trustees, executors, etc.), then all those registered should sign this proxy. For securities registered in the name of a corporation, estate, trust or minor, an authorized officer or attorney must sign this form and state his or her signing capacity or position. This person may also have to provide proof that he or she is authorized to sign.
4. This form of proxy should be signed in the exact manner as the name appears on the proxy.
5. If this form of proxy is not dated, it will be deemed to be dated the date this form was received by or on behalf of us.
6. **The shares represented by this form of proxy will be voted as you direct, however, if you do not make a direction in respect of any matter, this proxy will be voted as recommended by management.**
7. If there are any amendments to the items of business identified in the Notice of annual meeting of shareholders or any other matters that properly come before the meeting, your proxyholder has the discretion to vote as he or she sees fit; in each instance, to the extent permitted by law, whether or not the amendment or other item of business that comes before the meeting is routine or contested.
8. This proxy should be read in conjunction with the Notice of annual meeting of shareholders, and the Management information circular.
9. Proxies are counted and tabulated by Computershare, TransCanada's transfer agent, in such a manner as to ensure the votes are kept confidential, except: (a) as required by law, (b) if there is a proxy contest, or (c) if there are written comments on the form of proxy.
10. Late proxies may be accepted or rejected by the chair of the meeting at his or her discretion and the chair of the meeting is under no obligation to accept or reject any particular late proxy. The chair of the meeting may waive or extend the proxy cut-off without notice.

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Proxies submitted must be received by 12:00 pm, Eastern Daylight Time, on May 3, 2017.

If the meeting is postponed or adjourned, we must receive your proxy at least 48 hours (excluding Saturdays, Sundays and holidays) before the start of the reconvened meeting.

VOTE USING THE TELEPHONE OR INTERNET 24 HOURS A DAY 7 DAYS A WEEK!



To Vote Using the Telephone

- Call the number listed BELOW from a touch tone telephone.

1-866-732-VOTE (8683) Toll Free



To Vote Using the Internet

- Go to the following web site:
www.investorvote.com
- **Smartphone?**
Scan the QR code to vote now.



To Receive Documents Electronically

- You can enroll to receive future securityholder communications electronically, by visiting www.investorcentre.com/transcanada. When you register for electronic documents a tree will be planted on your behalf.

If you vote by telephone or the internet, DO NOT mail back this proxy.

Voting by mail, courier or hand delivery is the only method for securities held in the name of a corporation or securities being voted on behalf of another individual.

Voting by mail or by internet are the only methods by which a holder may appoint a person as proxyholder other than the management nominees named on the reverse of this proxy. Instead of mailing this proxy, you may choose one of the two voting methods outlined above to vote this proxy.

To vote by telephone or the Internet, you will need to provide your CONTROL NUMBER listed below.

CONTROL NUMBER



Appointment of Proxyholder

I/We, being shareholder(s) of TRANSCANADA hereby appoint: **S. Barry Jackson, Chair**, or failing him **Russell K. Girling, President and CEO**, or failing him **Christine R. Johnston, Vice-President, Law and Corporate Secretary**

OR

If you wish to appoint someone to act as your proxyholder, other than the management nominees listed in this form of proxy, print the name of the person you are appointing as your proxyholder in the box to the right:

as my/our proxyholder with full power of substitution and to vote in accordance with the following direction (or if no directions have been given, as the proxyholder sees fit) and all other matters that may properly come before the **Annual Meeting of TransCanada to be held at the Markin MacPhail Centre, Canada Olympic Park, 88 Canada Olympic Road S.W., Calgary, Alberta T3B 5R5 on Friday, May 5, 2017 at 10:00 a.m. (Mountain Daylight Time)** and at any adjournment thereof.

VOTING RECOMMENDATIONS ARE INDICATED BY **HIGHLIGHTED TEXT** OVER THE BOXES.

1. Election of Directors

	For	Withhold		For	Withhold		For	Withhold		For	Withhold
01. Kevin E. Benson	<input type="checkbox"/>	<input type="checkbox"/>	02. Derek H. Burney	<input type="checkbox"/>	<input type="checkbox"/>	03. Stéphan Crétier	<input type="checkbox"/>	<input type="checkbox"/>	04. Russell K. Girling	<input type="checkbox"/>	<input type="checkbox"/>
05. S. Barry Jackson	<input type="checkbox"/>	<input type="checkbox"/>	06. John E. Lowe	<input type="checkbox"/>	<input type="checkbox"/>	07. Paula Rosput Reynolds	<input type="checkbox"/>	<input type="checkbox"/>	08. Mary Pat Salomone	<input type="checkbox"/>	<input type="checkbox"/>
09. Indira V. Samarasekera	<input type="checkbox"/>	<input type="checkbox"/>	10. D. Michael G. Stewart	<input type="checkbox"/>	<input type="checkbox"/>	11. Siim A. Vanaselja	<input type="checkbox"/>	<input type="checkbox"/>	12. Richard E. Waugh	<input type="checkbox"/>	<input type="checkbox"/>

For Withhold

☐☐

2. Appointment of Auditors

Resolution to appoint KPMG LLP, Chartered Professional Accountants as auditors and authorize the directors to fix their remuneration.

For Against

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3. Advisory Vote on Executive Compensation

Resolution to accept TransCanada's approach to executive compensation, as described in the Management information circular.

The proxy is solicited by and on behalf of the management of TransCanada. This form of the proxy, when properly executed, confers discretionary authority with respect to amendments to the matters identified in the Notice of annual meeting of shareholders or other matters which properly come before the meeting and the replacement of any nominee identified above if such nominee becomes unable or unwilling to serve. Management knows of no such amendments, replacements or other matters. The shares represented by this proxy will be voted or withheld from voting on any ballot that may be called for. Where the person whose proxy is solicited specifies a choice with respect to any matter to be voted upon, the shares shall be voted in accordance with the choice so made. If no choice is specified, the shares represented by this proxy will be voted as recommended by management.

Signature(s)

Authorized Signature(s) - This section must be completed for your instructions to be executed.

I/We authorize you to act in accordance with my/our instructions set out above. I/We hereby revoke any proxy previously given with respect to the meeting. If no voting instructions are indicated above, this proxy will be voted as recommended by management.

Signing Capacity (if applicable)

Date

MM / DD / YY

Interim Financial Documents

In accordance with securities regulations, shareholders may elect annually to receive interim financial statements and management's discussion and analysis, if they so request. If you wish to receive interim financial statements and management's discussion and analysis, please mark this box:

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Annual Financial Statements and Annual Reports

As a registered shareholder you will receive annual financial statements, management's discussion and analysis relating to annual financial statements, and annual reports. If you DO NOT want to receive these materials, please mark the box. If you do not mark the box, you will continue to receive these materials.

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As always, you can access TransCanada reports online at www.transcanada.com

